## APPENDIX G

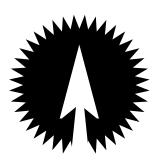
Four Visions of the Timber Industry (AFA)

# Four Visions of the Timber Industry on the Tongass National Forest

Prepared for the Governor's Southeast Regional Timber Task Force

**December 12, 1996** 

By
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Timber Issues Committee
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## FOUR VISIONS OF THE TIMBER INDUSTRY ON THE TONGASS NATIONAL FOREST

### INTRODUCTION

With the announcement by Ketchikan Pulp Company (KPC) that its pulp mill will close in March 1997, the timber industry in Southeast Alaska as we have known it for 40 years is coming to an end. It has been an integrated industry consisting of sawmills manufacturing products from the higher grade spruce and hemlock logs, and pulp mills manufacturing dissolving pulp from lower grade spruce and hemlock logs and the residual sawmill chips. Most cedar logs have been exported.

The industry, which was based on the pulp mills, met the goal assigned to it by Congress in the 1947 Tongass Timber Act, viz., to supply high paying, year-round jobs in the region. For many years, forest products provided more private employment in Southeast Alaska than any other industry.

The purpose of this paper, and particularly the accompanying charts, is to set forth four distinct visions of the future Tongass timber industry to assist the Governor's timber task force in developing a business plan for the timber industry designed to restore and maintain a sustainable timber industry for the benefit of Southeast Alaska families and timber dependent communities.

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With the changes to the industry brought about by the loss of the pulp mills, we must consider the entire Alaska timber supply, not just the Tongass, as a single wood basket. No longer should there be a federal forest activity and a separate private forest activity, each going in its own direction. A shrinking wood basket will require cooperation among the Small Business Administration (SBA) and independent federal timber purchasers, the University of Alaska, the Alaska Mental Health Trust, municipalities, the Alaska Department of Natural Resources and Native private timber owners. A shrinking wood basket will limit the size of new capital investment in primary manufacturing facilities. Changing U.S. markets and Asian markets may require that wood products from Alaska come in different forms.

Various studies indicate that demand for the right products from Tongass timber is open ended; the problem has been lack of a consistent fiber supply. The challenge is to produce higher value added or finished products competitively. For example, the Japanese market for hemlock round logs is being displaced by lumber suppliers outside of Japan. Alaska needs to supply economic, finished, kiln dried hemlock lumber to that market.

### THE NEED FOR AN INTEGRATED FOREST INDUSTRY

An integrated forest industry must consist of all of the direct and indirect components necessary for a sustainable forest industry that is economically, environmentally and socially sound. Elements of such an industry must include support industries such as tug and barge lines, financial services and communications, to name just a few.

The industry must also be of sufficient size so that its individual components are self sustaining. For example, the annual timber sale program must be large enough to support at least several road building and logging contractors on a sustainable basis. The number of these contractors having a reasonable probability of staying in business is primarily a function of the overall size and reliability of the annual timber sale program.

When total sales volume drops below a certain level, the likelihood that some contractors will not be successful bidders often enough to stay in business is increased. As local contractors drop out of the picture, other firms from outside the state are likely to pick up the slack, but at a higher overall cost, thus changing the economics

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of the harvest program. Furthermore, skilled workers residing in local communities move elsewhere when the local contracting jobs go away, thus revealing the untoward social consequences to the larger Alaska community.

The size and mix of individual sale offerings are also important factors in determining whether or not a viable, integrated industry can exist. For example, for larger operators, any given timber sale must be of sufficient size to justify establishing a remote camp. It must also provide enough work to justify mobilizing road building and logging crews and equipment. The economies of scale simply must be there to make ongoing harvesting viable.

On the other end of the scale, smaller operators must have sales that are within their financial capabilities. The high capital outlays for bonding and pre-roading of larger sales often prohibit smaller operators from purchasing larger sales, or sales in more remote locations. By the same token, a small operator may, in some instances, benefit from the economies of scale enjoyed by the larger outfits, by purchasing some of the harvested wood from those sales. The point is all sizes of businesses must be successful if Southeast Alaska is going to have a stable, competitive integrated industry.

Another important element of an integrated forest industry is its ability to consume the full range of raw materials found in the typical Tongass forest stand. Forest stands in Southeast Alaska are not uniform. They have the potential to supply a wide range of products from medium density fiberboard (MDF) to piano sound boards. Utilizing all the wood requires means to process both the high and low value logs as well as residual material. With the close of the pulp mills, a serious gap has been created in the industry's ability to utilize effectively the raw material coming off the forest; in particular, pulp logs and residual chips from sawmill operations.

Any timber industry business plan must include a strategy for the utilization of pulp logs, which comprise up to 50% of the harvest, and residual chips from the primary processing facilities. With the KPC pulp facility out of the picture, there will be no local market for this material. Furthermore, at least in the near term, there may be no economic export market for Alaska pulp wood in either round log form or chips, due to the high cost of transportation and the availability of much lower cost alternative raw materials nearer the point of consumption. Many industry analysts predict that this trend will be long-term, adding yet another reason the material should be processed in Southeast Alaska. As will be made clear by the charts, any industry

plan which fails to include realistic options for the utilization of pulp logs and residual chips probably will not be viable.

High value products, such as clear molding, music stock, scaffold planks, ship masts and spars, or aircraft components typically are made only from the higher grades of wood, utilizing only a small fraction of the average forest stand. In other words, a fairly substantial volume must be harvested and processed into other value added products, such as MDF, oriented strand board (OSB), kiln dried construction lumber, shop grade lumber, and finger joint stock. The Governor's Marketing Alaska effort in 1995 identified a wide range of such value added commodities, most of which could eventually be produced by the Southeast forest industry.

The high value added product is the pinnacle of the range of Tongass forest products, but it probably cannot exist in any substantial form independent of the infrastructure and support provided by the industry as a whole; particularly in Southeast Alaska. High value specialty product manufacturers do not require large volumes of wood, and so tend to supply a high rate of jobs per mmbf, but they are hampered by problems of scale, making it difficult for them to economically harvest only the wood they need. It would be unreasonable to expect the high value specialty product

manufacturer to go into the road building, logging and sawmill business in order to supply him or herself with the relatively small volume of high quality raw materials needed. This points up the strength of an integrated industry. By concurrently meeting the raw material supply needs of the high value added manufacturer and the needs of the sawmills and low end processing facilities, operators will move enough material to realize economies of scale in order to keep everyone in business.

### FOUR VISIONS OF AN INTEGRATED TONGASS TIMBER INDUSTRY

The visions set out here include the concept of a downsized industry and the need to differentiate between "cottage sized" versus diversified medium sized manufacturing facilities. The redeveloped industry must be large enough to sustain an economy of scale. It must have the presence and support of small business ancillary companies in the supply and service fields. It must have a viable and economic transportation network, and finally it must have a diverse logging and road building capability strong enough to meet the continuing challenges of operating in remote Southeast Alaska. New installed milling facilities will provide fewer primary manufacturing jobs per mmbf of timber processed than in the past due to the use of new technologies and efficiencies. This reduction in primary manufacturing jobs will

likely be more than offset by the growth in more labor intensive value added processing if the total timber program is sufficiently large to generate the requisite amount of high value raw materials. Jobs per mmbf in the logging, road building, loading of barges and ships and in the administration of these activities are expected to remain at current levels.

Harvest volumes shown in the four scenarios reflect only the core timber supply needed from the Tongass National Forest to sustain a viable industry. It does not include volume from other ownerships, such as Native corporations, which cannot be considered a reliable supply to independent operators. In developing the charts, we have assumed that new facilities for low grade logs and value added milling will be financed only if a supply of national forest timber is contractually guaranteed for a reasonable period of time, so that investments can be amortized.

We have also assumed that for the next several years the Forest Service will sell more timber than will be processed with the goal of filling the "timber pipeline" with three years of volume. Selling more timber than is harvested is necessary to provide the flexibility to adequately respond to market demands and to offset volume loses that will occur due to litigation on individual sales. Also, it takes 3 to 5 years to

develop and harvest larger timber sales. It should be noted that any Allowable Sale Quantity (ASQ) is a cap on timber sale availability and not a targeted sales amount. Over the past ten years, actual wood delivered to the mills has averaged only about 67% of the ASQ.

### **SUMMARY**

The Task Force can use the four scenarios (or visions) described in the attached charts as an aid in developing the business plan requested by the Governor. The charts present probable employment levels in the timber industry based upon a guaranteed supply of timber at four different levels. In developing the four scenarios, we assumed that TLMP will be completed and, since an ASQ of 520 mmbf is legal and sustainable, we assumed that TLMP will contain selectable alternatives allowing each of the ASQ levels discussed therein. Under the first scenario, 1,736 jobs would be provided because the harvest level allows development of a low grade log manufacturing facility and several other value-added facilities. This scenario represents to many the minimum volume needed to sustain a viable timber industry.

The second alternative, at 420 mmbf, would provide 2,317 jobs, which would be a modest increase in the industry's job base following the closure of the two pulp

mills. It would also be about half of the jobs which existed when the Tongass Timber Reform Act passed Congress in 1990. Scenarios 3 and 4 describe the possible industry at harvest levels of 100 mmbf and 200 mmbf, and show that the industry can produce roughly 500 to 1000 jobs, but even at the 200 mmbf level, the industry's future is doubtful because there would be insufficient volume to support a low-end value log processing facility.

Irrespective of volume levels, the industry will need protection against interruptions in supply (such as litigation and delays in the NEPA process caused by ESA listing proposals and other factors). If the annual cut is just at subsistence level, for the remaining industry, backup volume ("pipeline volume") becomes all the more essential to maintaining the industry's health. It is therefore imperative that the Forest Service sell more timber than will be harvested until a three year supply is restored to the pipeline to consistently provide whatever target volume is identified in the Tongass Plan. Having that buffer volume available will also provide industry and the Forest Service the flexibility to take advantage of sharp adjustments in the market.

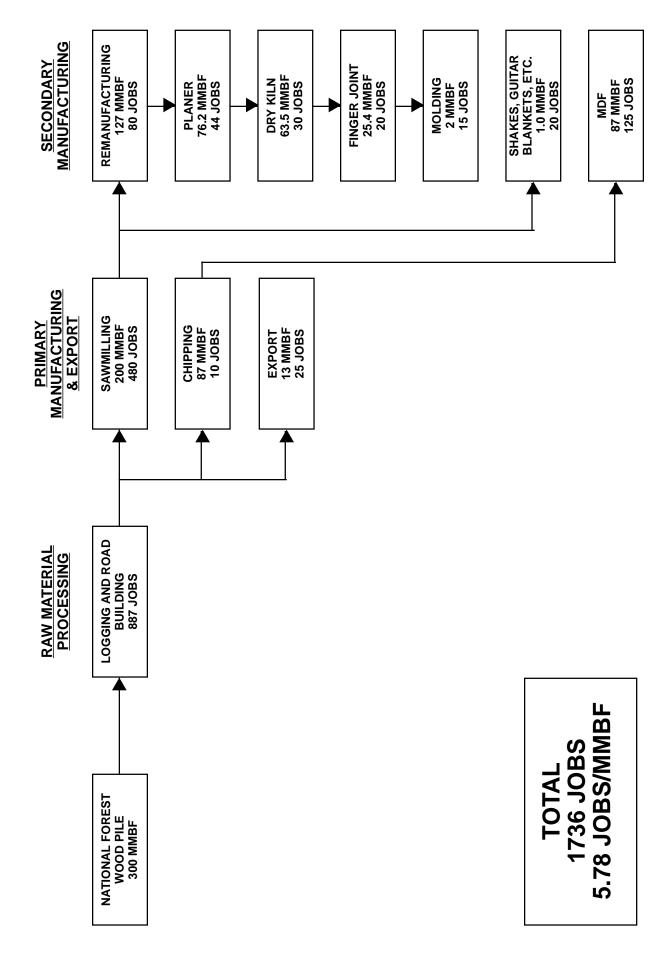
In addition to pipeline volume, the industry needs a contractual guarantee of timber supply to secure and maintain financing for existing and proposed facilities. A

contractually guaranteed timber supply will assure investors and bankers that their investments and loans can be amortized, thus permitting investors and bankers to approve those investments and loans in the first place.

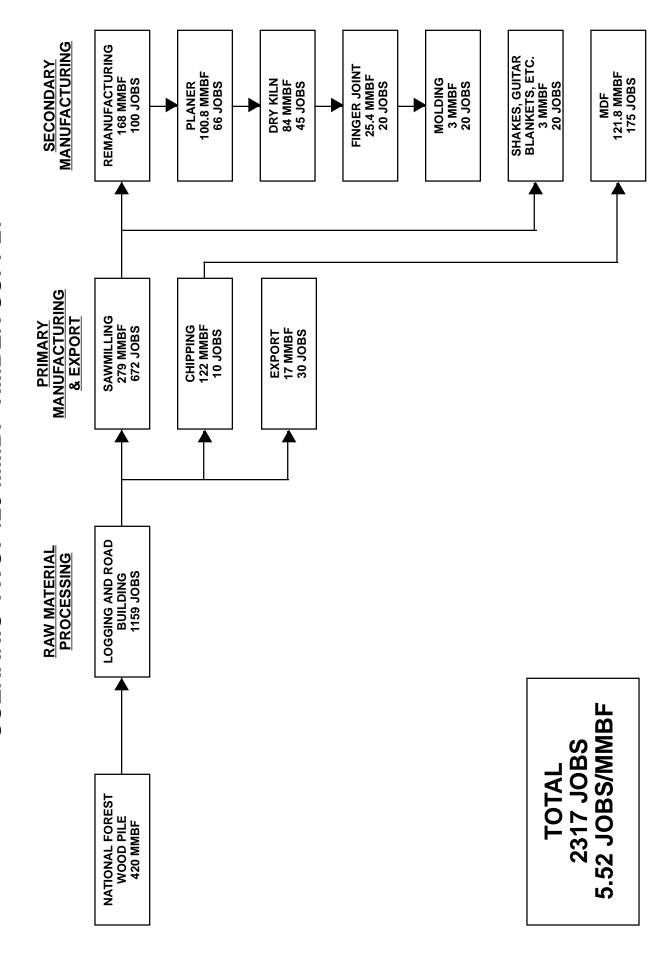
A contractually guaranteed timber supply will also make it possible to obtain the financing necessary to attract investments in a residual chip and pulp log manufacturing facility such as an MDF plant or OSB mill or perhaps even a veneer mill. The importance of an assured supply of timber over a sufficiently long period of time to amortize the investment in plant and equipment cannot be over emphasized. This fact was amply demonstrated by the comments made by representatives of the financial community at the Wrangell meeting of the Task Force. Alternatives to an assured supply such as underwriting by the Alaska Industrial Development and Export Authority (AIDEA) are simply not a substitute for an assured supply. Such underwriting in the absence of an assured supply would in all likelihood simply lead to yet another Delta Barley fiasco-an outcome both unwanted and unnecessary. Southeast Alaska has the resources in timber, skills and entrepreneurial drive to restore a sustainable integrated timber industry. All that is missing is an assured supply of timber.

## **Charts**

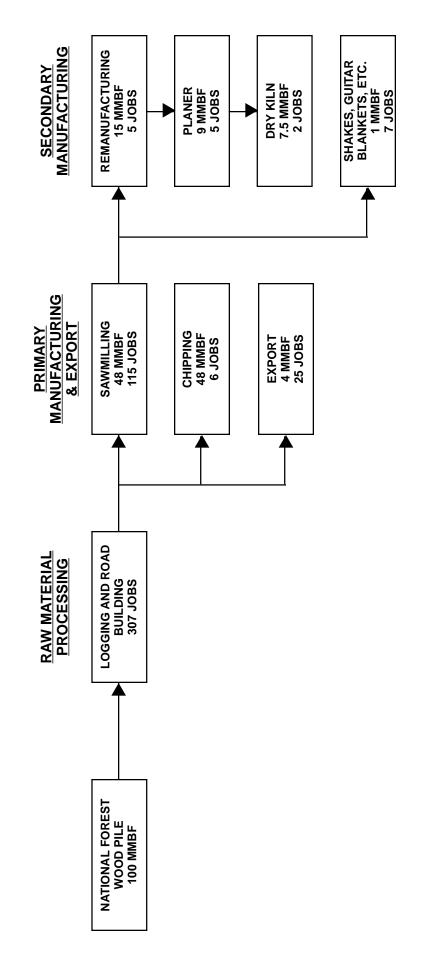
# **SCENARIO ONE: 300 MMBF TIMBER SUPPLY**



# SCENARIO TWO: 420 MMBF TIMBER SUPPLY

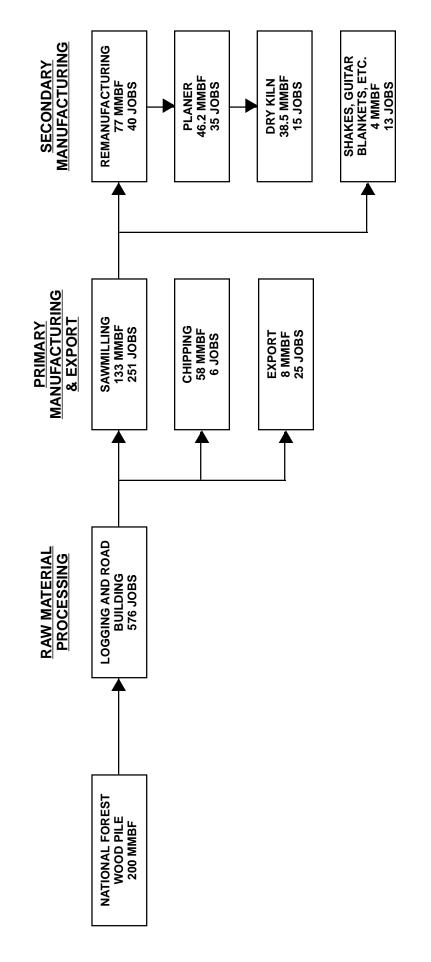


# **SCENARIO THREE: 100 MMBF TIMBER SUPPLY**



TOTAL 472 JOBS 4.72 JOBS/MMBF

# **SCENARIO FOUR: 200 MMBF TIMBER SUPPLY**



TOTAL 961 JOBS 4.81 JOBS/MMBF

# **Appendices**

### **APPENDIX A**

Descriptions of the Scenarios Set Forth in the Charts

Scenario #1: 300 mmbf

This is the volume selected by the Forest Supervisor's as the preferred alternative in the draft TLMP. It is also the volume selected by the Governor (i.e., sufficient

volume for KPC plus 100 mmbf for small businesses).

Under this scenario, there would be sufficient volume to justify a facility to

process low grade logs and residual chips. Approximately 309 jobs would be provided

through road construction, 578 jobs through timber harvesting and 25 jobs through

exporting cedar. There would be 490 jobs in primary manufacturing. The sawmills

would be operating at 70-75% capacity. There would be 125 jobs connected with the

pulp log and residual chip facility and 209 jobs connected with other value-added

manufacturing facilities such as re-manufacturing, planing, kiln drying, finger joints,

molding and shakes.

Total employment under this scenario would be 1,736 or 5.78 jobs/mmbf, about

the job level at which the industry will be after the closure of the KPC pulp mill.

While a pulp log and residual chip facility operating on 87 mmbf per year could be established, the operation would be marginal and would suffer from cost inefficiencies.

### Scenario #2: 420 mmbf

This is the preferred alternative from the February 1993 draft TLMP Record of Decision (ROD), which reflects the current allowable sale quantity. It provides industry more flexibility and allows for greater economies of scale. Under this alternative, there would be an MDF facility to handle low grade logs and by-product chips along with a finger joint facility. We also anticipate an opportunity for four remanufacturing plants, and four planing operations, three dry kilns, four molding facilities and five cedar shake facilities which would provide 271 jobs. In combination with the 175 jobs provided by the MDF plant, this scenario would provide 446 value added manufacturing jobs.

There would be 420 jobs in road construction, 739 jobs in timber harvesting and 30 jobs in log sorting and export. There would also be 682 jobs connected with primary manufacture (sawmills and chipping). At this level, the existing sawmills could continue to operate.

Total employment under this scenario would be 2,317 or 5.52 jobs per million board feet. Again, this is the alternative that would provide the most flexibility and economies of scale and the most jobs.

### Scenario #3: 100 mmbf

Under this scenario, there is not sufficient volume to operate a low grade log processing facility. These materials would therefore be subject to the fluctuations in the export chip market which, as discussed earlier, are currently highly problematic. Under current conditions in the export chip market, this would not be a viable alternative. However, assuming a solution could be found to the chip dilemma, scenario three might produce approximately 115 jobs connected with road building, 192 jobs connected with timber harvesting and 25 jobs connected with log exporting. Finally, there would be 121 jobs connected with primary manufacture sawmills and chipping operations. It would be possible to operate a planer, a dry kiln and five cedar shake facilities, for a total of 19 jobs. Thus, under Scenario #3, there could be a total of 472 jobs or 4.72 jobs per million board feet. Obviously, we would be looking at a further significant job loss within the timber industry. It is doubtful that a viable timber industry is sustainable over the long term at this volume level.

### Scenario # 4: 200 mmbf

Scenario #4, like #3 above, may not be viable in that it does not provide a sufficient volume to justify a facility to process chips and other residuals. However, as with #3, if this problem could be solved, scenario #4 could produce just under 1,000 jobs, distributed among the various industry segments in roughly the same proportion as scenario #3.

### **Summary**

Job levels in these four visions or scenarios range from a low of 472 under Scenario #3 to a high of 2,317 under Scenario #2. Scenario #1, which requires an annual harvest of slightly more than the ASQ set forth in the Forest Supervisors' Preferred Alternative to the 1996 TLMP revision, would allow for approximately 1,736 jobs, roughly what will remain after the Ketchikan Pulp Mill closes its doors. These jobs would be heavily concentrated in southern Southeast Alaska and Sitka, thereby assisting the economics of timber dependent communities. All would be high paying jobs; many would be year-round.

### **APPENDIX B**

### Methodology Used in Developing the Charts

Each of the timber industry scenarios describes the components of the timber industry which could be developed and sustained given the availability of a certain volume of wood. We have chosen four alternative volume levels at which to make these projections. The first scenario assumes a volume of 300 mmbf, which is the volume recommended by the Forest Supervisors in the preferred alternative for the Revised TLMP. The second alternative assumes a volume of 420 mmbf, which is approximately what the industry had available to it at the time of passage of the Tongass Timber Reform Act (TTRA) in 1990. The third alternative describes what type of industry could exist if annual supply were limited to 100 mmbf. Finally, a fourth scenario is analyzed at the 200 mmbf level.

In each scenario, we have attempted to determine where the logs would go among the existing and proposed facilities, how much of the volume would be pulp logs of various sizes which could be available to a low grade log manufacturing facility, and how much would be cedar. We have then considered whether there is sufficient volume to supply a medium density fiberboard (MDF) facility or an oriented

strand board (OSB) facility and other value-added facilities, and what minimum size facilities may be economically viable. Having made these determinations, we have estimated the number of jobs that could be supported by the industry.

Finally, we have assumed that the Tongass Land Management Plan (TLMP) will provide realistic, selectable alternatives which would permit the selection of any of the visions described herein. As a consequence of recent requests by the U.S. Fish & Wildlife Service (USF&WS) this may not be the case. We have been advised that if the USF&WS requests, set forth in the attached letter of November 19, 1996, to Beth Pendleton were to be realized, not even the 100 mmbf scenario would be possible.

On December 20, Governor Knowles' Southeast Regional Timber Task Force passed this resolution urging the Federal government to finalize the plan for timber harvest from the Tongass National Forest.

Task Force members, including mayors of Southeast Alaska cities, understands the needs of the people and communities of the Tongass. They know that timber harvest is compatible with sport fishing and hunting, commercial fish and tourism. They believe in a balanced, multiple use of the forest that allows for a significant industry as well as supporting other uses of the Tongass. They understand the need for sufficient timber supply to keep both the forest and the economy healthy.

They want the government to quit stalling and to finalize the forest plan so Alaskans can get back to work.



A Managed Forest is a Healthy Forest for Today and Tomorrow. Alaska Forest Association

# SOUTHEAST REGIONAL TIMBER TASK FORCE RESOLUTION SUPPORTING THE TIMBER INDUSTRY

**WHEREAS** the mission statement for the Governor's Southeast Regional Timber Task Force calls on the Task Force to "develop a vision and a plan to achieve a balanced industry . . . that is economically viable," and further calls on the Task Force to "identify immediate steps necessary to allow (remaining) businesses to remain viable," and

**WHEREAS**, the Southeast Regional Timber Task Force has held five meetings over the last four months to discuss the future of the timber industry in Southeast Alaska; and

WHEREAS employment and economic prosperity in Southeast Alaska are inextricably linked to the resources of the Tongass National Forest and are dependent on their management; and

**WHEREAS**, jobs in the forest products industry are an important element of the economic diversity and opportunity in the region allowing communities to maintain healthy economies; and

**WHEREAS** industry members of the Task Force have advanced an outline of a business plan which shows that an annual harvest of 300 mmbf is the minimum level the industry believes is necessary to sustain an integrated timber industry in Southeast Alaska; and

**WHEREAS**, the industry model indicates the potential for maximizing employment in the forest products industry by developing additional secondary manufacture of wood products within the state; and

**WHEREAS**, coupled with the need for a stable fiber supply, the success of secondary manufacturing in Southeast Alaska depends on a healthy primary manufacturing component, including a facility to process low end wood; and

**WHEREAS** the industry model suggests including the application of new technology, enhanced productivity and expanded marketing efforts in the new Tongass timber industry;

**THEREFORE, BE IT RESOLVED** that at a minimum the preferred alternative of the Tongass Land Management Plan announced by the forest supervisors be maintained because any decision to further reduce the harvest level in the Tongass below that volume will devastate the existing timber industry infrastructure throughout Southeast Alaska; and

**FURTHER RESOLVED** that the State of Alaska strongly objects to any reduction in the volume of the preferred alternative and to any further delay in the issuance of the Record of Decision for the Tongass Land Management Plan revision.

## Attachments



### **United States Department of the Interior**

FISH AND WILDLIFE SERVICE Southeast Alaska Ecological Services 3000 Vintage Blvd., Suite 201 Juneau, Alaska 99801-7100

November 19, 1996

Beth Pendleton Co-Leader of TLMP Team USDA Forest Service 8465 Old Dairy Road Juneau, AK 99801

Dear Ms. Pendleton:

As stated in previous letters to the Forest Service, including the August 22, 1996, comments to the Draft Revised TLMP, the Service considers the 1995, Anadromous Fish Habitat Assessment (AFHA); the Interagency Viable Populations (VPOP) Committee's May, 1993, report, A Proposed Strategy for Maintaining Well-distributed. Viable Populations of Wildlife Associated With Old-growth Forest in Southeast Alaska (Strategy); the 1994, USFS, Pacific Northwest Research Station (PNW) document, Review of Wildlife Management and Conservation Biology on the Tongass National Forest: A Synthesis with Recommendations (Peer Review); the VPOP Committee's 1994, Response to the Peer Review of: A Proposed Strategy for Maintaining Well-Distributed. Viable Populations of Wildlife Associated with Old-Growth Forests in Southeast Alaska (Response); the Alexander Archipelago Wolf; Queen Charlotte Goshawk; and Marbled Murrelet Conservation Assessments to represent the best scientifically defensible fish and wildlife management and planning tools available at this time. The Service continues to recommend that concepts presented in these documents be fully incorporated into the selected alternative. The Service also recommends that responsive vehicles for adaptive management schemes for incorporation of new information be included in the Standards and Guidelines.

The following is the Service's position on the principle outstanding issues raised as a result of our review of information recently provided by the Forest Service concerning TLMP Team modifications of the April, 1996, preferred alternative.

<u>Issue: Old-growth Reserve Strategy</u>

In response to the Peer Reviewers' recommendations, the VPOP Committee recommended logging and road building be restricted to areas other than the three largest old-growth forest patches within each ecological province. Using the Forest Service "1996 TLMP RSDEIS Dev/Non-Dev LUDs and Big 3 OG" map, it appears that the current proposed old-growth strategy

does not prohibit logging and roading in these areas. The following three provinces are examples in which the three largest old-growth patches are not protected from further fragmentation. In Province 3 on east Chichagof Island, the old-growth patch in VCUs 194, 195, and 196 is not fully protected. Only about half of the patch in VCU 210 and 211 is protected. A portion of the patch in VCUs 235 and 236 is not protected in VCU 236. In Province 11 on Kuiu Island, the block south of Saginaw Bay (VCU's 399, 400, 402, and 421) will not be protected: The block north of Rowan Bay (VCU 400, 401, and 402) is not fully protected. None of the three largest patches are fully protected in Province 9 (Sumdum, Windham Bay, Port Houghton).

These largest blocks should be completely protected as reserves to prevent further fragmentation and maintain future management options as recommended by the Committee. Additional reserves will be required to meet the VPOP Committee distance criteria. Incorporating other nondevelopmental LUDs other than the old-growth LUDs into the old-growth habitat strategy is acceptable, when these areas contain suitable old-growth habitat blocks. However, the distance between actual suitable contiguous habitat blocks within these LUDs should comply with the VPOP committee criteria (not the distance between nondevelopment LUD boundary lines) when significant portions of nondevelopment LUDs are unforested or contain low amounts of high quality forest habitat. For example, the distance between the large blocks of old-growth habitat in the west Chichagof Province and old-growth habitat in adjoining nondevelopment LUDs is greater than the distance between the non-development LUD boundaries in the area. All the reserves should meet the VPOP reserve composition, but the 1993 VPOP reserve sizes should be considered a minimum as the Peer Reviewers recommended larger reserves. The Service recommends including the other large old-growth blocks in each province (as designated on the Forest Service "1996 TLMP RSDEIS Big 5 OG Block" map) as components of the reserve system for the forest. In other words, use the best contiguous blocks of habitat available as the basis for the reserve system.

The Service concurs with the Peer Reviewers and VPOP Committee Response that logging or road building be restricted to areas outside reserves except where specific essential circumstances may warrant. New roads should not be constructed in reserves. Existing roads not is use for current operating uses or intercommunity transportation should be effectively removed or closed.

Known stands of rare volume classes 6 and 7 below 800 feet should be maintained as old-growth reserves or corridors as recommended in the VPOP Response.

<u>Issue: Connectivity and Small Habitat Conservation areas (Old-growth Habitat Reserves)</u>

As recommended by VPOP, the main <u>function</u> of small habitat conservation areas (old-growth reserves) is as temporary habitat for wildlife dispersing between large and medium HCAs. The <u>composition</u> of small HCAs, as described by VPOP, include: Small HCAs should be greater than or equal to 1600 acres, and contain at least 800 acres of old-growth (8 MMBF/acre). Lands not suitable for timber harvest, buffers, and other removed lands should be utilized to the extent practicable.

Current old-growth reserve criteria differ fundamentally from the VPOP recommendations. Altering the minimum size of reserves to a percentage per VCU is without biological justification. Current criteria for omitting small reserve within a given VCU also differ substantially from VPOP recommendations. The current criteria do not appear congruent with the function of small reserves to provide temporary habitat for wildlife dispersing between larger reserves, as they allow small reserves to be established which do not have the ability to support resident or dispersing wildlife.

The connectivity provided by small HCAs is dependent upon their placement and composition. To determine how well currently designated small HCAs provide for connectivity between old-growth reserve areas, 30 VCUs within four sale areas ranging across the forest were examined. Their size, connectivity and composition were examined. Due to the limitations of the data provided (e.g., Forest-wide old-growth distribution and acreage spreadsheets of combined nondevelopment areas) the acreage of each HCA, or the amount of old-growth within each could not be determined with precision. However, the following general trends were observed:

- 1) VCUs which according to VPOP recommendations should contain small HCAs did not, especially in the Eight Fathom sale area.
- 2) Some HCAs were less than the minimum 1600 acre size, some were much larger than this or were contiguous with HCAs in other VCUs to provide a large old-growth reserve (e.g., Honker Divide).
- 3) Some HCAs appeared to include existing blocks of productive old-growth, although others were designed around planned harvest sale units.
- 4) Provision of connectivity was extremely variable. Many small HCAs were isolated due to water, elevation, existing clearcuts (especially along beach corridors and riparian zones), and abutment to extensively logged private lands. Some were fragmented by existing clearcuts and existing or planned roads. Many were linked to other old-growth reserves solely through riparian zones or beach fringe. While this is a recommendation of the VPOP Committee, and makes intuitive sense, it is critical to note that where these habitat types provide sole connections across otherwise unsuitable landscapes, they need to be adequate in both width and composition. The VPOP response recommends connecting large HCAs with corridors that are 1600 feet in width, and medium HCAs with corridors of at least 1000 feet. These corridors should be located at elevations of less than 800 feet, be unlogged, and be composed of vegetation similar to that within the HCAs to enhance survival of dispersing animals. Breaks in these corridors should be less than 65 feet wide. The VPOP response further recommends that beach corridors serving as travel corridors linking HCAs be 3300 feet wide and subject to only selective harvest.
- 5) Where small HCAs adjoined non-development LUDs, these connections were often of limited use to wildlife due to elevational barriers.

6) As one example of a missed opportunity to provide connectivity, within the Control Lake sale area on Prince of Wales Island a large old-growth reserve has been established within Honker Divide. Yet this reserve is disconnected from the Karta Wilderness Area to the south despite the opportunity to provide for this connection by establishing a small reserve in the Rio Roberts watershed. This connection would provide for continuity of a large reserve system and protect an important existing watershed study area. This is but one example where increased planning for connectivity could improve the current reserve strategy.

It appears that the mapped reserves we examined do not meet the small reserve criteria.

In summary, connectivity is not being provided adequately by the current alternative, and opportunities exist to improve the function of the reserve strategy through consideration of this critical function.

We recommend re-examining the criteria and placement of small reserves, preferably by an interagency IDT familiar with the areas to be mapped. While the current small reserve strategy probably results in equal or greater acreage being reserved, the placement and function of these parcels are critical to the success of any habitat strategy intended to provide for long-term biodiversity.

### **Issue: Matrix Management**

The matrix is the body of the Tongass between the old-growth reserves including those areas that will be actively managed for timber production. The current preferred alternative results in the additional harvest of 502,000 acres of old-growth by 2095. When added to acres already harvested (-387,000 acres of national forest lands and 5-600,000 acres of private or state owned lands), well over a million acres of old-growth forest will be converted to younger seral stages. This harvested acreage exceeds the total size of many national forests in other parts of the United States, and is not an inconsequential action. The time needed to restore old-growth characteristics to logged lands has been estimated at 250-300 years, a long-term commitment. These factors require a careful long-term approach to avoid adverse consequences that will not be corrected for generations to come.

VPOP recommends that in order to maintain minimum viable populations of all forest wildlife species well distributed across the landscape, that:

logging be concentrated on lower volume stands to restore the relative abundance of low, medium and high quality productive old-growth (low-grading), and

no logging occur in a 3300' buffer along all saltwater shorelines.

Although the Forest Service states they are exceeding the intent of VPOP recommendations, neither of these recommendations are fully met.

The Service firmly believes that all productive old-growth is not of equal value to wildlife.

Factors that result in lower timber values or operability, such as low density forest or steep slopes, often also correspond to lower wildlife values. Not all acres within the matrix will be harvested and these residual stands will provide some benefit for wildlife. However, it is likely that these remnants will be of lower value than contiguous blocks of better quality forest. Although the harvest of adjacent units may be separated by decades, which in human terms seems to be a long time, such harvest will result in a continuous blanket of young (<100 years old) seral stage forest of minimal value for many wildlife species.

An array of approaches has been discussed to minimize the long-term adverse consequences of old-growth conversion to younger forest conditions. These include, but are not limited to, use of alternative silviculture to reduce habitat quality loses created by clearcuts, and lengthening rotations so managed stands can acquire and offer old-growth characteristics for a portion of the rotation. The Service recommends aggressive implementation of silvicultural methods that result in the retention of old-growth characteristics in accordance with existing Forest Service national policy.

### **Riparian**

In general, the Service agrees that the incorporation of Riparian Option 2 with Forest-wide and specific process group Standards and Guides and Watershed Analysis will maintain the biological productivity of the Forest's fishery resources and prevent management resulting in the loss of fish stocks. However, several Service recommendations remain unaddressed:

- 1) AFHA recommends no timber harvest in floodplains of glacial outwash, alluvial fan, and floodplain process groups prior to watershed analysis. Current Standards and Guides for these channel types prohibit commercial timber harvest within 100 feet of the stream, but allow unprogrammed timber harvest within the remainder of the riparian management area. This prescription could be strengthened by requiring Watershed Analysis prior to allowing unprogrammed harvest within the floodplain outside of the 100 foot minimum buffer.
- 2) Class IV streams are defined under Fish Standards and Guides, and their management is discussed under Riparian Standards and Guides where it is stated that they will be managed as part of the hillslope, but clear language in the Soils and Waters standards and guides needs to specifically describe how Class IV streams will be treated.
- 3) The plan needs to note the FHAT caveat on the limitations of the Tongass Fish Habitat Objectives ("[these data] should be considered a starting point for developing quantifiable indices to assess and monitor aquatic habitat condition. . .") and identify strengthening these as a research/information need in Appendix B, Information Needs.

### Issue: Goshawk Management

The following comments are based on the information and suggestions contained in the Northern Goshawk in Southeast Alaska Conservation Assessment. (Page numbers refer to the draft goshawk assessment)

The goshawk assessment does not provide specific management recommendations. The risk assessment done so far only considers one aspect of a management strategy (300-year rotation). The Service repeated this risk analysis using data provided by the TLMP team, and found the following:

Management units managed under rotations shorter than 300 years (Based on 0.33% annual removal from all POG in the unit since 1954 as basis for 300-year rotation).

Management Unit (n)	Units with >13.7% harvest of POG* in 1995	Units with >47.0% harvest of POG in 2095
VCU (932)	136 (15%)	85 (9%)
Mgmt. Area (149)	24 (16%)	8 (5%)
Province (21)	1 (5%)	0

<sup>\*</sup> POG = Productive old-growth

This analysis suggests that currently 15% of the Tongass is not consistent with one facet of goshawk habitat use patterns. Furthermore, this inconsistency is concentrated in particular Management Areas, not dispersed across the forest, decreasing suitability over substantial contiguous sections of the forest. Under the new plan, an improvement is noted, but 100 years into the future, the inconsistency remains.

The goshawk assessment suggests the application of a reserve strategy where high past timber harvest has occurred or is planned. Areas of concern highlighted in the goshawk assessment (Figure 8) include: Chichagof, Baranof, Kruzof, Kuiu, Kupreanof, Mitkof, Zarembo, Revillagigedo, Prince of Wales and associated islands, and several locations on the Alaska mainland. The Service concurs with this strategy.

The Service agrees that beach and riparian buffers may provide substantial additions of goshawk habitat for those individuals in proximity to those areas. However, goshawks in interior portions of the landscape do not benefit from these allocations. Nor do goshawks benefit where these buffers have already been substantially altered by past management. Goshawk nest buffers of 100 acres specified in the Standards and Guides have minimal benefit for goshawks. These nest buffers may result in the retention of individual nest trees, but do little to protect foraging areas which may be the critical limiting resource in southeastern Alaska.

The Service recommends that the FS:

Conduct a risk analysis that incorporates additional information indicated by the

assessment. Specifically, describe the change in the availability of productive old-growth thought to be of value to goshawks based on elevation, slope, and quality (i.e., What proportion of the available is high or very high). Determine if the amount of remaining POG is consistent with values observed for goshawk use areas. Incorporate a risk factor for harvest on private lands within the Province.

Manage the Forest so harvest levels are consistent with a 300-year rotation scheme (p. 93) at the VCU level (p. 98), particularly for habitats preferred by goshawks (higher volume stands on gentle slopes low elevations).

### Issue: Alexander Archipelago Wolf Management

The following comments are based on the information and suggestions contained in the Alexander Archipelago Wolf Conservation Assessment and information regarding the current preferred alternative to the extent it was available at the time of this analysis.

### Road Construction and Access Management

- -Limit new road construction
- -Where road densities exceed 0.4 kilometers per square kilometer on islands with significant human population (e.g., POW, Mitkof and Revilla), effectively close road systems to achieve road densities of less than 0.4 kilometers per square kilometer.
- -Close all roads within established no timber harvest LUDs, except essential roads connecting communities or facilities.
- -Review and identify human access/ wolf mortality issues that may exist on islands with low human populations in cooperation with the Service and ADF&G.

### Habitat Management

- -Maintain a minimum average deer density of at least 13 deer per square mile in wildlife analysis areas that currently support this density. Where current deer densities are lower than 13 deer per square mile, maintain at least current deer densities.
- -Establish at least one large unfragmented, unroaded reserve (capable of supporting at least 18 deer per square mile) in each Biogeographic Province within ADF&G Game Management Units 2 and 3.
  - -Based on information available to the Service, Provinces 11 and 18 meet or exceed Wolf Assessment suggested large reserve size (acres). Provinces 10, 13, 14 and 17 do not meet this criterion. This analysis is based on preliminary information. We suggest further discussion of this matter to verify data and application of wolf assessment strategy.
  - -Some reserves, such as the Central POW large reserve, contain roads and previously logged areas that lower habitat quality. Diminished quality should be compensated by increased size.
  - -Intuitive screening of the recently provided Deer Capability Densities (deer model results) suggests that predicted deer densities are not realistic. The model does not predict deer densities it predicts deer habitat capability. The model also does not address stochastic events, such as abnormally high snow fall, which is reasonably likely to occur, and will adversely affect deer populations.

### Issue: Standards and Guidelines

The majority of objectives in the forest-wide standards and guidelines (S/Gs) are not in concert with the purpose and definitions as stated in 36 CFR Part 219. The regulations state that the plan must contain goals, measurable objectives, quantitative standards and guidelines, and monitoring and evaluation requirements. objectives should respond to goals, and each goal should have concise, measurable objective(s). Specificity is an important component of a structured planning approach. The objectives for the majority of forest-wide standards and guidelines are neither concise nor time-specific. The Service has made this same comment on previous drafts of the S/Gs and in the August 22, 1996, letter to the Forest Service.

Monitoring and evaluation are also identified as criteria for decision in the consistency check table. The monitoring and evaluation requirement will not provide a basis for determinating accomplishment of objectives until the objectives are changed from the general to the specific in compliance with regulatory requirements.

Monitoring and evaluation are integral components of the planning process. To complete an effective planning cycle requires that funding must be provide for these purposes. This is the mechanism that will determine how well the objectives in the standards and guidelines are being met. Funding for these activities must be a required part of Forest Service operations. The Service recommends that at the beginning of project implementation funding be in place to conduct monitoring and evaluation.

### The Future of Interagency Cooperation in the Management of the Tongass National Forest

The Tongass National Forest covers a vast geographical area, and provides fish, wildlife aesthetic and other resources of enormous economic, recreational, commercial, scientific and ecological value. It supports the world's greatest remaining wild anadromous salmon population. Although managed by the Forest Service, the exercise of public trust responsibilities associated with the Tongass devolves to numerous Federal and State agencies. As trustees, our duty is to enhance the value of the trust for the benefit of the American people, not merely to administer its gradual diminution.

The concept of interagency partnership is explicitly provided for in a variety of Federal conservation laws, particularly in the Endangered Species Act. In December, 1994, the Service, Forest Service and Alaska Department of Fish and Game entered into a Memorandum of Understanding that explicitly established a cooperative program to promote the conservation of species tending toward listing under Federal or State ESA. The Service has sought MOU implementation by serving as a member of the TLMP IDT. It has further contributed through the NEPA process, and by support of interagency studies associated with petitioned or species at risk

It is the intent of the Service to continue in this vein, and, to the extent permitted by staffing, funding, and prioritizing of on-going work, enhance its involvement with the Forest Service on Tongass operational and planning activities. Furthermore, it is the intent of the Service, utilizing the budget process, to expand its capabilities in this arena.

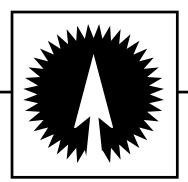
Throughout the planning process now nearing closure, Regional Forester Phil Janik has steadfastly maintained that Tongass management must be science based. The Service's involvement, thus grounded, has sought to assure the fulfillment of this goal. The question before us is: Where do we go from here? The Service believes that the cooperative working relationship exhibited over the last two years is but a flawed, pale shadow of that which will evolve as we enter the 21st century. What we need now is a scientific reality check: To evaluate where we have been, where we are, and direct our progress. To that end, the Service recommends a reconvening of the VPOP Committee or similar group to guide our future cooperative efforts: To determine those areas of conservation concern needing further investigation, refinement or possible alteration; to assure, to the extent possible, that the environmental problems and associated socioeconomic tragedies experienced elsewhere are never visited on the people of Southeast Alaska.

To achieve this goal has been the intent of the spectrum of Service input to the TLMP process over the last several years. This letter is intended to clarify and supplement previously provided information. It is not to clarify and supplement previously provided information. It is not be construed as a comprehensive review of outstanding issues.

Sincerely,

Nevin D. Holmberg Field Supervisor

### **Alaska Forest Association, Inc.**



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August 5, 1996

The Honorable Tony Knowles Governor of Alaska State Capitol Juneau, AK 99801

Dear Governor Knowles:

Thank you for your recent visit to Ketchikan and for your recent statements of support for the timber industry.

I am writing today to begin a discussion of an important related topic, the issue of "value added." It seems there are two very different ideas represented by the way people use this term, and it is important that we settle on a common definition.

The use of the term "value added" to describe an increase in the value of products derived from natural resources which creates jobs from a given resource is entirely appropriate. For example, we supply important valuable commodities and create more local employment by producing finished lumber from sawlogs in Alaska than we do from merely Cutting cants or shipping round logs out of state. By the same token, from a jobs creation standpoint, having pulp mills in Alaska that can utilize the low value wood from our local forests is preferable to simply shipping chips outside. The contrast can be seen by comparing a pulp mill, which creates 450 jobs, with a chipping facility, which creates 15 to 20.

We all agree that if we can find ways to encourage manufacturing of wood products within the state beyond pulp and finished lumber, we can add to the jobs per million board feet of timber harvested. We therefore prefer to have sawmills operating in Alaska to supply the basic stock necessary for secondary and tertiary manufacturing. A healthy primary manufacturing industry is essential if we hope to have any secondary manufacturing facilities. It is important to note also, that to avoid high-grading our forests, we must continue to maintain local usage of the large number of utility logs harvested along with the sawlogs.

Ignoring the "value added" benefits of having one or more pulp manufacturing plants here, as some do, is to fail to recognize the necessity of an integrated basic industry which uses the available resources. Facilities such as pulp mills are needed here as a step to additional value added activities.

The second idea that is sometimes expressed by the use of "value added" is quite different. Some people seem to use the term as a slogan for aminimal harvest. This idea envisions small cottage industries of people harvesting only a few trees a year, almost on a personal use basis, for the production of artifacts and other small scale operations. This cannot substitute for the healthy economy that industrial scale harvesting provides.

The forests of Alaska are biologically capable of sustaining industrial harvests, the communities of Southeast have come to depend on industrial harvests, and there is no sound reason for us to abandon a goal of sustainable industrial harvests in favor of the minimalistic industry associated with this definition of "value added."

I think we could all benefit from discussions of this topic over the next several months. While I have attempted to roughly define the issue here, the matter is quite complex. It must take into account such things as economies of scale, the actual timber resource under consideration, transportation issues, and much more.

Also, I-see this as a statewide matter, not just a localized problem in Southeast. SB 180, for instance, raises the issue of a sustainable industrial harvest in such places as the Tanana Valley, the Haines State Forest and the Kenai Peninsula, given the size of state owned timberlands in those areas.

I truly believe that both your administration and the forest products industry would benefit from a series of discussions on this topic. I am willing to put considerable effort into making that happen if you are so inclined. Please let me know your thoughts on the matter.

Sincerely

Jack Phelps

**Executive Director**